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## (54) LIGHT SOURCE DEVICE

## (57)Abstract:

PURPOSE: To obtain a planar light source which is large, lightweight, thin, and has uniform high precision over the whole screen by composing the observer side plane of a transparent substrate by an inclined curved plane, forming a rough plane on one side of the transparent substrate, permitting the other side to be a mirror plane and providing a reflecting layer under the transparent substrate.

CONSTITUTION: One plane on the reflecting plate 4D for the transparent substrate of the transparent substrate 4A is composed of a flat smooth plane 4a, and the other opposing plane is composed of the rough plane 4b which is rougher than the flat smooth plane 4a and is composed of the inclined curved plane so as to prevent light quantity per unit area on the diffusing plate 6 from decreasing when it is apart from the light source 4B. Namely, the transparent substrate 4A is composed of the continuous inclined curved plane which becomes thinner as it is apart from the light source 4B. The reflection directivity is obtained by the inclined curved plane of the rough plane 4b, and the brightness on the diffusing plane 6 on the transparent substrate 4A is fixed. Thus, the thin, lightweight, large area light source which allows the uniform brightness is obtained.



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